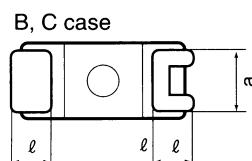
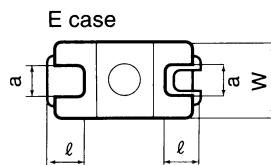
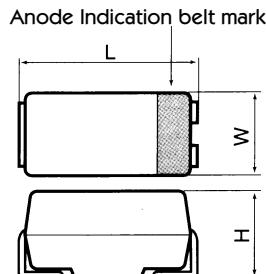
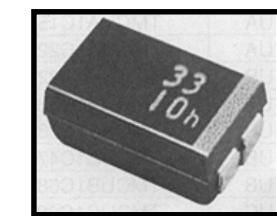


TMCR Series**•Low ESR Tantalum Chip Capacitors**

The TMCR Series offers ultra low ESR for tantalum chip capacitors. They are suitable for hight frequency applications such as high speed PC, Switching Regulators, DC/DC converters, and similar product designs.

Outline Drawings and Dimensions**TMCR Case Code Table**

Case Code	Dimensions				
	L ± 0.2	W ± 0.2	H MAX	$\ell \pm 0.3$	a ± 0.2
B	3.5	2.8	1.9	0.8	2.2
C	5.8	3.2	2.5	1.3	2.2
E	7.3	4.3 ± 0.3	2.8	1.3	2.4

For Specifications see Table on Page 153.

TMCR Product Markings

B Case		C, E Case	
<p>Simplified code of rated voltage (G: 4V) GA7a Anode Indication belt mark Date Code (for manufacturing in January, 2003) Simplified code of nominal capacitance (A7: 10μF)</p>		<p>Nominal capacitance value (15μF) 1516a Anode Indication belt mark Date Code (for manufacturing in January, 2003) Rated voltage (16V)</p>	
Note: The simplified code is subject to JIS C 5143 10.1.2.			

Tantalum Capacitor Date Code Table

Month Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	n	p	q	r	s	t	u	v	w	n	n	n
2001	A	B	C	D	E	F	G	H	J	K	L	M
2002	N	P	Q	R	S	T	U	V	W	X	Y	Z
2003	a	b	c	d	e	f	g	h	j	k	l	m

TANTALUM CAPACITORS

TMCR Series

•Low ESR Tantalum Chip Capacitors

Rated Voltage (WVDC)	Part Number	Capacitance	Capacitance Tolerance	Tangent	ESR @20° C	Dimensions			Quantity	
						L x W* x H (±0.2) (±0.2) (MAX)	ℓ (±0.3)	a (±0.2)	180mm Dia. Reel	330mm Dia. Reel
6.3 Volts DC (Code: 0J)	TMCRB0J106KTR	10	±10%	0.06	0.7	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRB0J106MTR	10	±20%	0.06	0.7	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRB0J156KTR	15	±10%	0.06	0.6	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRB0J156MTR	15	±20%	0.06	0.6	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRB0J226KTR	22	±10%	0.06	0.5	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRB0J226MTR	22	±20%	0.06	0.5	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRC0J336KTR	33	±10%	0.06	0.35	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC0J336MTR	33	±20%	0.06	0.35	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC0J476KTR	47	±10%	0.06	0.35	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC0J476MTR	47	±20%	0.06	0.35	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRE0J686KTR	68	±10%	0.06	0.2	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE0J686MTR	68	±20%	0.06	0.2	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE0J107KTR	100	±10%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE0J107MTR	100	±20%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE0J157KTR	150	±10%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE0J157MTR	150	±20%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE0J227KTR	220	±10%	0.10	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE0J227MTR	220	±20%	0.10	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE0J337KTR	330	±10%	0.15	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE0J337MTR	330	±20%	0.15	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
10 Volts DC (Code: 1A)	TMCRB1A106KTR	10	±10%	0.06	0.7	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRB1A106MTR	10	±20%	0.06	0.7	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRB1A156KTR	15	±10%	0.06	0.6	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRB1A156MTR	15	±20%	0.06	0.6	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRC1A226KTR	22	±10%	0.06	0.5	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1A226MTR	22	±20%	0.06	0.5	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1A336KTR	33	±10%	0.06	0.35	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1A336MTR	33	±20%	0.06	0.35	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1A476KTR	47	±10%	0.06	0.25	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1A476MTR	47	±20%	0.06	0.25	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRE1A686KTR	68	±10%	0.06	0.2	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1A686MTR	68	±20%	0.06	0.2	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1A107KTR	100	±10%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1A107MTR	100	±20%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1A157KTR	150	±10%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1A157MTR	150	±20%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1A227KTR	220	±10%	0.10	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1A227MTR	220	±20%	0.10	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500

*Case Code E: Width (W) = ±0.3

TANTALUM CAPACITORS

TMCR Series

•Low ESR Tantalum Chip Capacitors

Rated Voltage (WVDC)	Part Number	Capacitance	Capacitance Tolerance	Tangent	ESR @20° C	Dimensions			Quantity	
						L x W* x H (±0.2) (±0.2) (MAX)	ℓ (±0.3)	a (±0.2)	180mm Dia. Reel	330mm Dia. Reel
16 Volts DC (Code: 1C)	TMCRB1C106KTR	10	±10%	0.06	0.6	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRB1C106MTR	10	±20%	0.06	0.6	3.5 x 2.8 x 1.9	0.8	2.2	2000	8000
	TMCRC1C156KTR	15	±10%	0.06	0.5	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1C156MTR	15	±20%	0.06	0.5	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1C226KTR	22	±10%	0.06	0.4	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1C226MTR	22	±20%	0.06	0.4	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRE1C336KTR	33	±10%	0.06	0.25	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1C336MTR	33	±20%	0.06	0.25	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1C476KTR	47	±10%	0.06	0.2	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1C476MTR	47	±20%	0.06	0.2	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1C686KTR	68	±10%	0.06	0.15	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1C686MTR	68	±20%	0.06	0.15	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1C107KTR	100	±10%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1C107MTR	100	±20%	0.08	0.1	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
20 Volts DC (Code: 1D)	TMCRC1D106KTR	10	±10%	0.06	0.6	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1D106MTR	10	±20%	0.06	0.6	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1D156KTR	15	±10%	0.06	0.5	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRC1D156MTR	15	±20%	0.06	0.5	5.8 x 3.2 x 2.5	1.3	2.2	500	2500
	TMCRE1D226KTR	22	±10%	0.06	0.35	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1D226MTR	22	±20%	0.06	0.35	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1D336KTR	33	±10%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1D336MTR	33	±20%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1D476KTR	47	±10%	0.06	0.2	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1D476MTR	47	±20%	0.06	0.2	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
25 Volts DC (Code: 1E)	TMCRE1E106KTR	10	±10%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1E106MTR	10	±20%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1E156KTR	15	±10%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1E156MTR	15	±20%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1E226KTR	22	±10%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1E226MTR	22	±20%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1E336KTR	33	±10%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
35 Volts DC (Code: 1V)	TMCRE1V106KTR	10	±10%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1V106MTR	10	±20%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1V156KTR	15	±10%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1V156MTR	15	±20%	0.06	0.3	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1V226KTR	22	±10%	0.06	0.5	7.3 x 4.3* x 2.8	1.3	2.4	500	2500
	TMCRE1V226MTR	22	±20%	0.06	0.5	7.3 x 4.3* x 2.8	1.3	2.4	500	2500

*Case Code E: Width (W) = ±0.3